

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 and 2 (canceled).

Claim 3 (currently amended): Limiter optics ~~as described in Claim 1 where said limiter assembly further comprises:~~ for an ignition feedback regenerative free electron laser amplifier having a pulsed output beam of predetermined duration from an undulator comprising:

A. A pickoff member using a convex pickoff mirror adapted to direct a portion of the output of said pulsed output beam as a pickoff beam and which expands said pickoff beam to a predetermined size; and

B. a limiter assembly adapted to bring said directed pickoff beam to a focus at a selected point within said undulator at a selected time where said limiter assembly further comprises:

A. (i) an expander mirror adapted to ~~modifying~~ modify spatial and temporal characteristics of said portion of the output picked off by said pickoff means;

B. (ii) a first focusing optics adapted to focusing said modified directed pickoff beam to a focal point;

~~C.~~ (iii) a limiter plate movably placed near said focal point so as to allow said focused modified directed pickoff beam to pass through said limiter plate;

~~D.~~ (iv) adjusting member operably connected to said limiter plate and adapted to move it closer to or farther from said focal point as desired; and

~~E.~~ (v) a second focusing optics placed after said pickoff beam has passed through said limiter plate and adapted to refocus said focused directed pickoff beam to a predetermined point in said ignition feedback regenerative free electron laser amplifier.

Claim 4 (currently amended): Limiter optics as described in Claim 2 ~~3~~ where said limiter assembly further comprises:

A. An expander mirror adapted to modifying spatial and temporal characteristics of said portion of the output picked off by said pickoff member;

B. a first focusing optics adapted to focusing said modified directed pickoff beam to a focal point;

C. a limiter plate movably placed near said focal point so as to allow said focused modified directed pickoff beam to pass through said limiter plate;

D. adjusting member operably connected to said limiter plate and adapted to move it closer to or farther from said focal point as desired; and

E. a second focusing optics placed after said pickoff beam has passed through said limiter plate and adapted to refocus said focused directed pickoff beam to a predetermined point in said ignition feedback regenerative free electron laser amplifier.

Claim 5 (previously presented): Limiter optics as described in Claim 3 where said expander mirror comprises a half silvered mirror adapted to change the pulse duration of the directed picked off portion of said pulsed output beam by a predetermined amount.

Claim 6 (previously presented): Limiter optics as described in Claim 4 where said expander mirror comprises a half silvered mirror which is adapted to change the pulse duration of the directed picked off portion of said pulsed output beam by a predetermined amount.

Claim 7 (previously presented): Limiter optics as described in Claim 3 where said expander mirror comprises a phased mirror having at least one step adapted to increase the pulse duration of the directed picked off portion of said picked output beam.

Claim 8 (previously presented): Limiter optics as described in Claim 4 where said expander mirror comprises a phased mirror having at least one step adapted to increase the pulse duration of the directed picked off portion of said picked output beam.

Claim 9 (previously presented): Limiter optics as described in Claim 3 wherein said first focusing optics comprises a Cassegrainian arrangement and said second focusing optics comprises a Cassegrainian arrangement.

Claim 10 (previously presented): Limiter optics as described in Claim 4 wherein said first focusing optics comprises a Cassegrainian arrangement and said second focusing optics comprises a Cassegrainian arrangement.

Claim 11 (previously presented): Limiter optics as described in Claim 5 wherein said first focusing optics comprises a Cassegrainian arrangement and said second focusing optics comprises a Cassegrainian arrangement.

Claim 12 (previously presented): Limiter optics as described in Claim 6 wherein said first focusing optics comprises a Cassegrainian arrangement and said second focusing optics comprises a Cassegrainian arrangement.

Claim 13 (previously presented): Limiter optics as described in Claim 7 wherein said first focusing optics comprises a Cassegrainian arrangement and said second focusing optics comprises a Cassegrainian arrangement.

Claim 14 (previously presented): Limiter optics as described in Claim 8 wherein said first focusing optics comprises a Cassegrainian arrangement and said second focusing optics comprises a Cassegrainian arrangement.

Claim 15 (original): Limiter optics as described in Claim 3 where said expander mirror comprises a phased mirror of striped mesas, said striped mesa being parallel to each other and having a preselected height.

Claim 16 (original):        Limiter optics as described in Claim 4 where said expander mirror comprises a phased mirror of striped mesas, said striped mesa being parallel to each other and having a preselected height.

Claim 17 (original):        Limiter optics as described in Claim 15 further comprising a Cassegrainian arrangement for said first focusing optics and a Cassegrainian arrangement for said second focusing optics.

Claim 18 (original):        Limiter optics as described in Claim 16 further comprising a Cassegrainian arrangement for said first focusing optics and a Cassegrainian arrangement for said second focusing optics.

Claim 19 (canceled).